AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A code allocation method for allocating a first set of first codes and a second set of second codes to mobile stations, the method comprising:

generating a third set of combined codes by multiplying said first codes by one of said second codes;

allocating each of said combined codes to each of said mobile stations;

transmitting spread spectrum signals with said combined codes to said mobile stations;

generating another set of combined codes by multiplying said first codes by another different code selected from said second set of said second codes after said third set of combined codes has been used to transmit [[said]] an approved spectrum signals.

2. (Previously Presented) A code allocation method for allocating a first set of orthogonal codes and a second set of scramble codes to mobile stations, which comprises the steps of:

generating a third set of combined codes by multiplying said orthogonal codes by one of said scramble codes;

arranging said combined codes in a priority order;

allocating each of said combined codes to each of said mobile stations;

transmitting spread spectrum signals with said combined codes to said mobile stations.

3. (Original) A code allocation method for allocating a first set of first codes and a second set of second codes to mobile stations, which comprises the steps of:

generating "M" sets of combined codes by multiplying said first codes by "M" said second codes, wherein M is defined by (int (N/S) +1), where N is the total number of code used by all the mobile stations connected with a base station and S is the total number of said orthogonal codes;

transmitting spread spectrum signals with said combined codes to said mobile stations.

4. (Original) The code allocation method according to claim 2, wherein:

said second codes are arranged in a priority order; and said combined codes are arranged in said priority order.

5. (Original) The code allocation method according to claim 2, wherein:

said first codes are arranged in a priority order; and said combined codes are arranged in said priority order.

6. (Previously Presented) The code allocation method according to claim 2, wherein said combined codes are arranged in such a priority order that said second codes give higher priority to said combined codes in order of the frequency of said second codes.

7. (Previously Presented) The code allocation method according to claim 6, wherein said frequency of said second codes is counted, excluding said second codes modulated into a commonly used control signal.

8. (Original) The code allocation method according to claim 2, wherein said combined codes are arranged in such a priority order that said second codes give higher priority to said combined codes in order of the greatness of summation of electric power of transmission signals with said second codes of the same value.

9. (Original) The code allocation method according to claim 2, wherein said combined codes are arranged in such a priority order that said second codes give higher priority to said combined codes in order of smallness of average electric power of transmission signals with same value of said second codes.

10. (Original) The code allocation method according to claim 9, wherein said average electric power is calculated, excluding commonly used control signal.

11. (Previously Presented) The code allocation method according to claim 2, wherein one of said combined codes allocated to a mobile station which ends its call is allocated to an other mobile station with the other of said combined codes with the lowest priority.

12. (Previously Presented) The code allocation method according to claim 2, wherein one of said combined codes allocated to a mobile station which stops temporarily its call is allocated to an other mobile station with the other of said combined codes with the lowest priority.

13. (Previously Presented) The code allocation method according to claim 2, wherein said code allocation is not executed, when the second code included in one of said combined codes of a mobile station which ends or stops temporarily its call is equal to the second code of an other mobile station with other of said combined codes of which priority is the lowest.

14. (Original) The code allocation method according to claim 2, wherein said base station notifies a relevant mobile station of said code allocation, when said code allocation is changed.

15. (Original) The code allocation method according to claim 2, wherein said code allocation is based on quantity of service requests from said mobile stations connected with said base station.

16. (Original) The code allocation method according to claim 15, wherein said service requests include a transmission error rate.

17. (Original) The code allocation method according to claim 15, wherein said service requests include a transmission speed.

18. (Original) The code allocation method according to claim 15, wherein said service requests include functions of transmission error rate and/or transmission speed.

19. (Original) The code allocation method according to claim 2, wherein said combined codes are allocated to said mobile stations on the basis of transmission qualities measured by said mobile stations.

20. (Original) The code allocation method according to claim 19, wherein said transmission qualities include electric power of interference noise.

21. (Original) The code allocation method according to claim 19, wherein said transmission qualities include electric power of commonly used control signal.

22. (Original) The code allocation method according to claim 19, wherein said transmission qualities include signal to interference noise ratio (SINR).

23. (Original) The code allocation method according to claim 19, wherein said SINR is a ration of an electric power of commonly used control signal from connected base station and an electric power of commonly used control signal from non-connected base stations.

24. (Original) The code allocation method according to claim 15, wherein said code allocation is executed, when a set of transmission signals from said base station is changed.

25. (Original) The code allocation method according to claim 24, wherein said base station notifies a relevant mobile station of said code allocation, when said code allocation is executed.

26. (Original) The code allocation method according to claim 1, wherein:

said first codes are orthogonal codes; and

said second codes are Gold codes or a part thereof.

27. (Previously Presented) The code allocation method according to claim 2, wherein:

said scramble codes are Gold codes or a part thereof.

28. (Original) The code allocation method according to claim 2, wherein said spread spectrum signal modulated by one of said combined codes include a commonly used control signal.

29. (Original) The code allocation method according to claim 28, wherein said one of said combined codes which is allocated to said commonly used control signal has the highest priority.

30. (Previously Presented) A base station for allocating a first set of first codes and a second set of second codes to "k" mobile stations, which comprises:

"k" spread adder units for inputting said second codes and transmission signals accompanied by said second codes for outputting spread spectrum signals; and

an adder for adding said spread spectrum signals from said "k" spread adders units, wherein:

a third set of combined codes is generated by multiplying said first codes by one of said second codes;

each of said combined codes is allocated to each of said "k" mobile stations;

said spread spectrum signals with said combined codes are transmitted from said adder to said "k" mobile stations; and

another set of combined codes is generated by multiplying said first codes by an other code selected from said second codes, for meeting ~~the~~ a shortage of said combined codes included in said third set.

31. (Original) A base station for allocating a first set of first codes and a second set of second codes to "k" mobile stations, which comprises:

"k" spread adder units for inputting said second codes and transmission signals accompanied by said second codes for outputting spread spectrum signals; and

an adder for adding said spread spectrum signals from said "k" spread adders units, wherein:

a third set of combined codes is generated by multiplying said first codes by one of said second codes;

said combined codes are arranged in a priority order;

each of said combined codes is allocated to each of said mobile stations; and

said spread spectrum signals with said combined codes are transmitted from said adder to said "k" mobile stations.

32. (Original) A base station for allocating a first set of first codes and a second set of second codes to "k" mobile stations, which comprises:

"k" spread adder units for inputting said second codes and transmission signals accompanied by said second codes for outputting spread spectrum signals; and

an adder for adding said spread spectrum signals from said "k" spread adders units, wherein:

"M" sets of combined codes are generated by multiplying said first codes by "M" said second codes, wherein M is defined by (int (N/S) +1), where N is the total number of code used by all the mobile stations connected with a base station and S is the total number of said orthogonal codes;

all the 1-st set to the (M-1)-th set of combined codes are allocated to the mobile stations; and

spread spectrum signals with said combined codes are transmitted to said mobile stations.

33. (Original) The base station according to claim 31, wherein:
said second codes are arranged in a priority order; and
said combined codes are arranged in said priority order.

34. (Original) The base station according to claim 31, wherein:
said first codes are arranged in a priority order; and
said combined codes are arranged in said priority order.

35. (Original) The code allocation method according to claim 32, wherein said combined codes are arranged in such a priority order that said second codes give higher priority to said combined codes in order of the use-frequency of said second codes.

36. (Original) The base station according to claim 32, wherein said combined codes are arranged in such a priority order that said second codes give

higher priority to said combined codes in order of the greatness of summation of electric power of transmission signals with said second codes of the same value.

37. (Original) The base station according to claim 32, wherein said combined codes are arranged in such a priority order that said second codes give higher priority to said combined codes in order of the smallness of average electric power of transmission signals with said second codes of the same value.

38. (Original) The code allocation method according to Claim 32, wherein one of said combined codes allocated to a mobile station which ends its call is allocated to other mobile station with other of said combined codes with the lowest priority.

39. (Original) The base station according to claim 38, wherein said code allocation is not executed, when the second code included in one of said combined codes of a mobile station which ends or stops temporarily its call is equal to the second code of the other mobile station with the other of said combined codes of which priority is the lowest.

40. (Original) The base station according to claim 32, wherein said base station notifies a relevant mobile station of said code allocation, when said code allocation is changed.

41. (Original) The code allocation method according to Claim 32, wherein said combined codes are allocated to said mobile stations on the basis of transmission qualities measured by said mobile stations.